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LETTER AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY COMMENTS TO  
RECORD OF DECISION SITE 30 BRACKEN ROAD INCINERATOR NWS YORKTOWN VA  
1/12/2010  
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

## Sawyer, Stephanie/VBO

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**Subject:** FW: NWSY: Sites 30 Record of Decision - DEQ Comments

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**From:** Smith,Wade [<mailto:Wade.Smith@deq.virginia.gov>]  
**Sent:** Tuesday, January 12, 2010 12:27 PM  
**To:** [tom.kowalski@navy.mil](mailto:tom.kowalski@navy.mil)  
**Cc:** Friedmann, William/VBO; Forshey, Adam/VBO; [Thomson.Bob@epamail.epa.gov](mailto:Thomson.Bob@epamail.epa.gov)  
**Subject:** NWSY: Sites 30 Record of Decision - DEQ Comments

I have completed DEQ's comments (track changes via Word) on the above-referenced ROD received December 28, 2009.

The comments have been posted to:

Yorktown Enterprise  
Documents  
Document Review  
Pre Draft ROD Site 30(DEQ)-1\_12\_10

Upon receipt of the requested revisions, the DEQ will issue an official letter for your files.

Please let me know if you have any questions.

Sincerely,  
wade

**Wade M. Smith**  
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Draft

## Record of Decision Site 30 Bracken Road Incinerator

Naval Weapons Station Yorktown, Yorktown, Virginia

December, 2009

### 1 Declaration

This Record of Decision (ROD) presents the selected remedy of No Further Action (NFA) for all media (soil, groundwater, surface water, and sediments) at the Environmental Restoration Program (ERP) Site 30, Bracken Road Incinerator, at Naval Weapons Station (WPNSTA) Yorktown, Yorktown, Virginia. The NFA determination has been made in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C §§9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR, Part 300. This decision is based on information contained in the Administrative Record (AR) file for the site. Information not specifically summarized in this ROD or its references<sup>1</sup>, but contained in the AR file has been considered and is relevant to the NFA determination for Site 30. Thus, this ROD is based upon and relies on the entire AR file for the site in making the decision.

**Comment [WMS1]:** Please include a reference to Attachment 3 in this ROD, or remove Attachment 3.

**Field Code Changed**

The United States Department of the Navy (Navy) is the lead agency and provides funding for ERP activities at Site 30. The Navy and United States Environmental Protection Agency (USEPA) Region 3, the lead regulatory agency, issue this NFA ROD jointly. The Commonwealth of Virginia Department of Environmental Quality (VDEQ), the support regulatory agency, participated throughout the investigation process, has reviewed this ROD and the materials on which it is based, and concurs with this decision for NFA. The NFA determination documented in this ROD for Site 30 does not include or affect any other sites at WPNSTA Yorktown.

#### 1.1 Selected Remedy

As a result of environmental investigations and removal actions completed at Site 30, there is no unacceptable risk to human health or the environment under current or potential future site uses. Therefore, the selected remedy for Site 30 is NFA for all media (soil, groundwater, surface water, and sediments). Because there are no hazardous substances, pollutants, or contaminants remaining onsite above the levels that allow for unrestricted use and unlimited exposure, a 5-year review will not be required.

<sup>1</sup> Reference phrases, presented as ***Bold Italicized Text***, are followed by a corresponding reference number from the References section.

**1.2 Navy Authorizing Signature for the No Further Action Record of Decision for All Media (Soil, Groundwater, Surface Water, and Sediments) at Site 30, Bracken Road Incinerator, WPNSTA Yorktown, Yorktown, Virginia**

\_\_\_\_\_  
Captain Bette Bolivar  
Commanding Officer  
Naval Weapons Station Yorktown

\_\_\_\_\_  
Date

**1.3 USEPA Region 3 Authorizing Signature for the No Further Action Record of Decision for All Media (Soil, Groundwater, Surface Water, and Sediments) at Site 30, Bracken Road Incinerator, WPNSTA Yorktown, Yorktown, Virginia**

\_\_\_\_\_  
Henry J. Sokolowski  
Director  
Office of Federal Facility Remediation and Site Assessment

\_\_\_\_\_  
Date



## 2 Decision Summary

### 2.1 Site Description and History

WPNSTA Yorktown is a 10,624-acre installation located on the Virginia Peninsula between the York River and James River in Virginia (**Figure 1**). WPNSTA Yorktown was established in 1918 to support the laying of mines in the North Sea during World War I. During World War II, the facility was expanded to include three trinitrotoluene (TNT) loading plants and new torpedo overhaul facilities. A research and development laboratory for experimentation with explosives was established in 1944. In 1947, a quality evaluation laboratory was developed to monitor special tasks assigned to the facility, which included the design and development of depth charges and advanced underwater weapons. Today, the primary mission of WPNSTA Yorktown is to provide ordnance, technical support, and related services to sustain the war-fighting capability of the armed forces in support of national military strategy.

**FIGURE 1**  
Regional Location Map with the Location of Site 30, Bracken Road Incinerator



Site 30 (formerly known as Area of Concern [AOC] 22 and Site Screening Area [SSA] 24), the Bracken Road Incinerator, encompasses an area approximately 304 square feet in the westernmost portion of Yorktown near the York River (**Figure 2**). Site 30 is located within the Explosive Safety Quantity Distance (ESQD), the area surrounding a restricted zone where ordnance destruction and disposal is on-going.

The incinerator was reportedly used for an unknown period of time to burn municipal waste from the base housing area located in the vicinity of the incinerator. Incineration of low-grade aviation fuel also was performed in an area just southeast of the former incinerator. Historical documents identified the burning of Venezuelan crude oil in the mid-1970s. Venezuelan crude oil has a higher specific gravity ~~then~~ than other crude oils and contains elevated concentrations of sulfur and several metals such as vanadium.

**FIGURE 2**  
 Site Layout – Site 30, Bracken Road Incinerator



## 2.2 Previous Investigations and Removal Actions

In 1995, Site 30 was identified as an area for further study when the USEPA Region 3 identified two depressions on either side of the incinerator. In addition, and a drainage way to the north, north-east of the incinerator, was also identified and contained various debris, including what appeared to be rocket motor fins. As a result, Site 30 was further characterized through a series of investigations and removal actions which are summarized in **Table 1** below.



**TABLE 1**  
Summary of Previous Studies and Investigations

Previous Study/Investigation*	Date	Investigation Activities
AOC 22, Site 12, SSA 2, SSA19, and King Creek Independent Sampling and Risk Screening Report	Black & Veatch, 1996	In 1995, 13 soil/sediment samples were collected from around the incinerator building, a cooling water basin, and in drainage ways in order to identify any regions of heavy contamination, or "hotspots." The samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) inorganics. The <b>analytical results</b> (Reference [Ref.] 1) indicated detections of iron, thallium, arsenic, lead, and vanadium at concentrations exceeding human health and ecological risk screening levels. Additional investigation was recommended in order to determine the nature and extent of contamination.
Site Screening Process Report, Volumes 1 through 3	Baker, 2001	<p>In 1997, eight surface soil sample, one subsurface soil sample, and one groundwater sample were collected to define the horizontal and vertical extent of organic and inorganic contamination at the site. The samples were analyzed for TAL inorganics. In addition, select samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and explosives. The <b>analytical results</b> (Ref. 2) indicated elevated concentrations of inorganics in surface soil and low, estimated levels of trichloroethene (TCE) in groundwater.</p> <p>Potential unacceptable risks in the surface soil were identified for human and ecological receptors due to elevated vanadium and iron concentrations in the area around the drainage way and a removal action was recommended. In addition, potential unacceptable risks were identified in surface soil, subsurface soil, and groundwater for human and ecological receptors and a Remedial Investigation (RI)/Feasibility Study (FS) was recommended to further evaluate these risks.</p>
Round One Remedial Investigation Report	Baker, 2005	In 2000, ten surface soil, nine subsurface soil, and 16 sediment samples (eight surface and eight subsurface) were collected to close remaining data gaps and aid in the completion of the Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA). Potential unacceptable human health risks were identified from exposure to vanadium in soils and TCE in groundwater. Potential unacceptable ecological risks to terrestrial communities were identified from exposure to inorganics in soil. No unacceptable risks to human health or ecological receptors were identified due to exposure to sediment. Based on these results, an Engineering Estimate/Cost Evaluation (EE/CA) was conducted to address the risks.
Engineering Evaluation/Cost Analysis for Contaminated Soil	Baker, 2007	In 2007, an Engineering Estimate/Cost Analysis (EE/CA) was completed to develop and evaluate <b>three remedial action alternatives</b> (Ref. 3) for the inorganic constituents posing potential unacceptable human health and ecological risk in site soil ( <b>Figure 2, Soil Hotspot</b> ). <b>Preliminary remediation goals (PRGs)</b> (Ref. 4) were developed to be protective of human and ecological receptors. Soil removal with offsite disposal was the selected remedial action alternative.

TABLE 1 (CONT.)

Summary of Previous Studies and Investigations

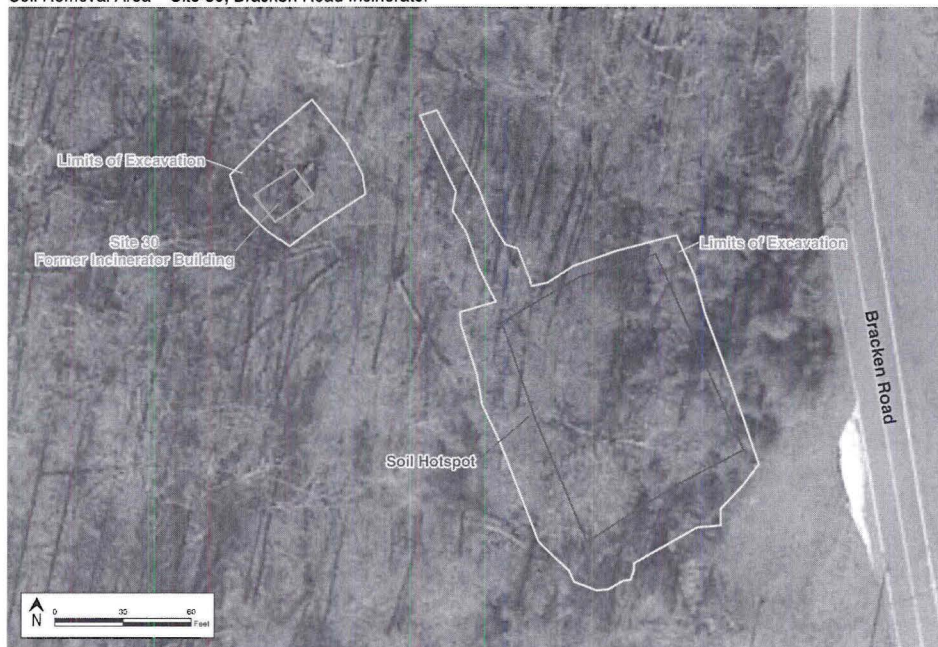
Previous Study/Investigation*	Date	Investigation Activities
Construction Completion Report Bracken Road Incinerator Removal Action at Site 30	Shaw, 2008	Between March and July 2008, approximately 2,265 cubic yards (3,398 tons) of contaminated soil, debris, and concrete were excavated from the Site and Soil Hotspot (Figure 3) as part of a Non-time-critical Removal Action (NTCRA) and disposed offsite. Confirmation soil samples, collected following the removal action, confirmed that the soil remaining onsite were <u>below the PRGs</u> (Ref. 5).
Technical Memorandum, Yorktown Site 30 Groundwater Data Review and Risk Management Consideration	CH2M HILL, 2009	In August 2008, one direct-push technology (DPT) grab groundwater sample was collected to confirm the presence or absence of organic compounds (including TCE) previously detected at low, estimated levels in monitoring well A24GW02 during the 2001 SSP investigation. Based on the <u>analytical results</u> (Ref. 6) and the fact that neither TCE nor its daughter products were detected on any other media during previous sampling events, the Navy, USEPA Region 3 and VDEQ agreed that no release of VOCs into the groundwater had occurred and no further investigation or remedial action was required for groundwater at Site 30.

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\* The documentation listed is available in the AR and provides information used to support the no action determination for Site 30.

FIGURE 3

Soil Removal Area – Site 30, Bracken Road Incinerator





### 2.3 Scope and Role of Operable Unit

Comprehensive environmental restoration activities at WPNSTA Yorktown began in 1984 under the Navy Assessment and Control of Installation Pollutants (NACIP) program prior to state and federal regulatory oversight of environmental activities at the installation. The NACIP program was modified to become the ERP in 1986 (then known as the Installation Restoration Program [IRP]) to meet the requirements of CERCLA as amended. WPNSTA Yorktown was added to the National Priorities List (NPL) on October 15, 1992 (USEPA ID: VA8170024170). A Federal Facilities Agreement (FFA) between the Navy and USEPA Region 3 was signed in August 1994. The FFA identified 16 sites and 19 SSAs for investigation and possible cleanup, and provided the framework and a schedule to accomplish this work. Subsequent to the FFA, additional sites, SSAs, and AOCs were added to the ERP. Currently, there are 25 sites including Site 30 and one SSA that are being evaluated in accordance with CERCLA and the NCP under the Navy's ERP, the status of which can be found in the current version of the Site Management Plan (SMP) in the AR file for WPNSTA Yorktown. The following sites are currently in the RI/FS stage of the CERCLA process:

- Groundwater, surface water, and ~~sediments~~sediments – Sites 1, 3, 4, and 22
- All associated media – Sites 8, 23, 24, 25, 26, 28, 30, 31, 32, 33, and 34

The following sites have a final ROD in place:

- Soil and waste – Sites 1, 3, 4, 6, 11, 17, 21, and 22
- Soil, surface water, and ~~sediments~~sediments – Site 9
- Soil – Site 19
- All associated media – Sites 5, 7, 12, 16, 18, ~~and~~ 27, and 29

Final RODs are pending for groundwater at Sites 11 and 17 and for all associated media at Site 29. The NFA determination documented in this ROD for Site 30 does not include or affect any other site at WPNSTA Yorktown.

### 2.4 Site Characteristics

All contaminated soil, debris, and concrete, from the demolition of the incinerator foundation at the Site and the Soil Hotspot were removed during the NTCRA. Site 30 is currently a cleared area within the woods near the WPNSTA fence line. The area in the site vicinity ranges in elevation between approximately 20 and 40 feet above mean sea level and slopes down toward the north. Continuous standing water is not present at Site 30. The Site receives surface water run-off from surrounding wooded areas that drains into a culvert that flows northeast, beneath the railroad tracks, across the WPNSTA fence line, through the small forested wetland between the WPNSTA property and Colonial National Parkway. The runoff eventually drains into the York River, located northeast of the Site.

Site 30 is underlain by unconsolidated granular deposits of sand with varying amounts of silts, clay, and cohesive deposits of silt with varying amounts of clay, fine-grained sand and marine shell fragments. Groundwater at the site is encountered from approximately 8 to 20 feet below ground surface in the unconfined Yorktown-Eastover aquifer. Based on site topography and available groundwater elevations, groundwater flows towards the north and eventually discharges to the York River.

### 2.5 Current and Potential Future Land and Resource Uses

Site 30 is located within the ESQD, the area surrounding a restricted area where ordinance destruction and disposal is still ongoing. Due to unacceptable safety hazards still posed by the activities within the ESQD, the area cannot be developed unless the mission of the Base changes substantially. Therefore, access to the site is limited to Navy personnel and there are no plans to change this land use.

Groundwater at WPNSTA Yorktown is not currently used for drinking water as drinking water is supplied by the City of Newport News Waterworks. In addition, drinking water is publically available, through the City of Newport News, to those domestic homes located within the vicinity of WPNSTA Yorktown. There are no contaminants in groundwater that would pose unacceptable risk to human health if used as a drinking water supply (Section 2.6.1).

## 2.6 Summary of Site Risks

Potential human health and ecological risks were evaluated and documented in the Round One RI (Attachment 1) prior to the removal actions conducted at Site 30 and in a technical memorandum (Attachment 1).

### 2.6.1 Human Health Risk Assessment (HHRA) Summary

As part of the Round One RI, an HHRA was completed. Based on the *human health conceptual site model (CSM)* (Ref. 7 and Attachment 1), risks were quantitatively evaluated for current adult and adolescent trespassers, current adult industrial/commercial workers, future adult construction workers, and future adult and child residents exposed to surface water, ~~sediments~~sediments, groundwater, and soil using reasonable maximum exposure (RME) and central tendency exposure (CTE) concentrations. Exposure pathways considered included ingestion and dermal contact for surface water and ~~sediments~~sediments and inhalation, ingestion, and dermal contact for groundwater and soil.

The RME calculation determines the highest level of human exposure that could reasonably be expected to occur, whereas the CTE level reflects a more realistic human exposure to average concentrations across the site. The potential non-cancer hazards, expressed as the hazard index (HI), and cancer risk estimates were calculated using RME concentrations. For non-cancer effects, an HI represents the ratio between the reference dose and the RME dose for a person in contact with site constituents of potential concern (COPCs). An HI exceeding 1 indicates that potential health effects are expected to occur. For known or suspected carcinogens, acceptable exposure levels generally are concentration levels that represent an excess upper bound lifetime cancer risk to an individual of between  $10^{-4}$  (a 1 in 10,000 chance of developing cancer) and  $10^{-6}$  (a 1 in 1,000,000 chance of developing cancer) using information on the relationship between dose and response.

Prior to completion of the NTCRA, *no potential unacceptable human health risks* (Ref. 8) were identified for any receptor from exposure to ~~sediments~~sediments or surface water, while *potential unacceptable human health risks* (Ref. 9) were identified for ingestion of and dermal contact with vanadium in soil (Table 2) and for ingestion of TCE in groundwater (Table 3).

TABLE 2

Summary of Potential Human Health Risks from Exposure to Vanadium, Prior to NTCRA

Receptor	Media	Pathway	EPC (mg/kg)	RME Cancer Risk	RME Non-Cancer (HI)	CTE Cancer Risk	CTE Non-Cancer (HI)	CSF mg/kg-day <sup>-1</sup>	RfD mg/kg-day
Current and Future Trespassers	Surface Soil	Dermal Contact	7,057	N/A	4.2	N/A	4.2	N/A	0.001
Current and Future Industrial Workers	Surface Soil	Ingestion	7,057	N/A	1.7	N/A	1.5	N/A	0.001
		Dermal Contact	7,057	N/A	2.7	N/A	23	N/A	0.001
Future Construction Workers	Subsurface Soil	Ingestion	187	N/A	0.63	N/A	0.63	N/A	0.001
		Dermal Contact	187	N/A	0.51	N/A	0.51	N/A	0.001
		Total		N/A	1.1	N/A	1.1	N/A	0.001
Future Adult Residents	Surface Soil	Ingestion	7,057		4.8		16	N/A	0.001
		Dermal Contact	7,057	N/A	13	N/A	87	N/A	0.001
Future Child Residents	Surface Soil	Ingestion	7,057	N/A	45	N/A	15	N/A	0.001
		Dermal Contact	7,057	N/A	59	N/A	39	N/A	0.001
	Subsurface Soil	Ingestion	187	N/A	12	N/A	0.4	N/A	0.001
		Dermal Contact	187	N/A	16	N/A	1	N/A	0.001

**Bold** represents an unacceptable human health risk

CTE = central tendency exposure

EPC = exposure point concentration; the concentration of COC detected by sampling and analysis before the removal actions

HI = hazard index

mg/kg = milligrams per kilogram

N/A = not applicable

RfD = Non-Cancer Toxicity Factor

RME = reasonable maximum exposure

mg/kg-day<sup>-1</sup> = milligrams per kilogram per day

mg/kg-day = milligrams per kilograms a day



**TABLE 3**  
Summary of Potential Human Health Risks from Exposure to TCE, Prior to Re-evaluation

Receptor	Media	Pathway	EPC	RME Cancer Risk	RME Non-Cancer (HI)	CTE Cancer Risk	CTE Non-Cancer (HI)	CSF mg/kg-day-1	RfD mg/kg-day
Future Child Residents	Groundwater	Ingestion	0.006 µg/L	$1.3 \times 10^{-6}$	1.3	$8.8 \times 10^{-6}$	0.85	0.4	0.0003

**Bold** represents an unacceptable human health risk

CSF = Cancer Toxicity Factor

CTE = central tendency exposure

EPC = exposure point concentration

HI = hazard index

mg/kg-day-1 = milligrams per kilogram per day

mg/kg-day = milligrams per kilograms a day

RfD = Non-Cancer Toxicity Factor

RME = reasonable maximum exposure

Following completion of the NTCRA, conducted in 2008, post-excavation **confirmation sampling results** (Ref. 10) verify that the vanadium concentrations in the soil remaining onsite (the maximum concentration detected was 63.3 milligrams per kilogram [mg/kg]) were below the PRG (65 mg/kg). Since the soil PRG for vanadium was established to be protective of human health, the Navy, USEPA Region 3, and VDEQ agree that no potential unacceptable risk remains onsite due to exposure to soil.

Due to the fact that the potential unacceptable non-cancer hazard identified from exposure to TCE in groundwater was due to an estimated TCE concentration, a confirmation groundwater sample was collected to confirm the absence or presence of TCE in the groundwater. The results of the confirmation groundwater sampling event verified that the TCE detected in groundwater was most likely a laboratory error and no release to groundwater had occurred. Therefore, since the analytical data used to identify a potential unacceptable non-cancer hazard due to exposure to groundwater could not be reproduced, the fact that TCE and its degradation products do not correspond with the known use of the site and may be the result of false positive detection based on the high number of estimated values in the 1997 data, and the fact that the TCE detected was only considered a risk under the RME scenario and only slightly exceeded the HI of 1.0, the Navy, USEPA Region 3, and VDEQ agree that there is no unacceptable risk to human health due to exposure to groundwater and NFA is necessary.

## 2.6.2 Ecological Risk Assessment Summary

As part of the Round One RI, potential ecological risks were evaluated in an ERA, in accordance with Navy and USEPA policy and guidance. Exposure routes evaluated included direct contact with soil, surface water, and sediments (aquatic lower-trophic receptors), root uptake from sediments (aquatic plants), ingestion of surface water (aquatic and terrestrial upper-trophic level receptors), incidental ingestion of sediments (aquatic upper-trophic level receptors), and ingestion of plant and animal tissues (aquatic upper-trophic level receptors). Groundwater was not evaluated since it does not present a direct exposure point for wildlife at the site and adequate surface water and sediments data were available for evaluation.

First, the environmental setting, chemical fate and transport, ecotoxicity and potential receptors and complete exposure pathways were identified. This information was used to develop an **ecological CSM** (Ref. 11 and Attachment 2) and **ecological assessment and measurement endpoints** (Ref. 12). Both terrestrial and aquatic pathways were assessed to be complete at Site 30. These receptor pathways were based on contaminants in soil, surface water, and sediments.

Next, hazard quotients (HQs) were calculated to characterize the potential for contaminants to pose unacceptable ecological risk using conservative exposure assumptions. HQs represent a ratio of the

exposure level to an ecological effect level, and are an estimate of potential risk. Maximum groundwater, ~~sediments~~sediments, surface water, and soil contaminant concentrations were used in this step to estimate potential exposures for the ecological receptors selected to represent the assessment endpoints at Site 30. Upper-trophic level effects based on contaminants present in surface soil, ~~sediments~~sediments and surface water were determined by estimating the concentration of each **bioaccumulating chemical** (Ref. 13) in each relevant dietary component. Only contaminants with the potential to bioaccumulate were evaluated for exposures via food web modeling.

**Media-specific screening values** (Ref. 14) for ecologically relevant media (i.e., soil, surface water, and ~~sediments~~sediments) were established for the assessment based on the USEPA Region 3 Biological Technical Assistance ~~Group~~ (BTAG) screening values; however, alternate screening values were used when BTAG values were unavailable or more conservative values were available. Alternate screening values were comprised of Ecological Soil Screening Levels (Eco-SSLs), National Ambient Water Quality (NAWQ) standards, Threshold Effects Levels (TELs) and Lowest Effects Levels (LELs) for lower trophic-level receptors and chronic No Observed Adverse Effect Levels (NOAELs) and chronic Lowest Observed Adverse Effect Levels (LOAELs) for upper trophic-level receptor. Chemicals with HQs greater to or equal to one were identified as **ecological COPCs** (Ref. 15) for further evaluation in Step 3 of the ERA.

Finally, the conservative exposure assumptions employed for the previous step were refined and risk estimates were recalculated using the mean instead of the maximum chemical concentrations of the COPCs as the basis for exposure and estimating upper trophic-level doses.

Prior to the NTCRA, **no potential unacceptable risks** (Ref. 16) were identified for any receptors from exposure to ~~sediments~~sediments. The risk associated with surface water was not directly evaluated due to the absence of continuous standing water onsite; as a result, groundwater data was evaluated as surrogate and **no unacceptable ecological risk** (Ref. 17) was identified. **Potential unacceptable ecological risks** (Ref. 18) to lower trophic-level receptors (plant and invertebrate communities) were identified from exposure to chromium, iron, lead, mercury, nickel, thallium, vanadium, and zinc in soil.

Following completion of the NTCRA, conducted in 2008, post-excavation **confirmation sampling results** (Ref. 19) verify that the ecological COCs in the soil remaining onsite are below their respective PRGs (Table 4). Since these PRGs were established to be protective of ecological receptors, the Navy, USEPA Region 3, and VDEQ agree that no potential unacceptable risk remains onsite due to exposure to soil.

**TABLE 4**  
Maximum Concentrations of COCs Remaining in Soil following Removal Action

COC	Chromium	Iron	Lead	Mercury	Nickel	Thallium	Zinc
Remediation Goal (mg/kg)	34	46,400	120	0.24	38	1	50
Maximum Concentration (mg/kg)	19.2	39,300	14.6	0.029	17.9	0.87	43.5

mg/kg = milligrams per kilogram

## 2.7 No Further Action Determination

Site 30 poses no unacceptable risk to human health or the environment. The Navy in partnership with the USEPA Region 3 and VDEQ agreed NFA is required under CERCLA for Site 30. Site conditions allow for unlimited use and unrestricted exposure. No remedial response action and no restrictions on any land use are necessary at Site 30.

**Comment [WMS2]:** The Final Proposed Plan states, "Site 30 is located within the Explosive Safety Quantity Distance (ESQD), the area surrounding a restricted area where ordnance destruction and disposal is still ongoing. Due to unacceptable risk still posed by the activities within the ESQD, the area cannot be developed unless the mission of the Base changes substantially." These statements appear to contradict that "site conditions allow for unlimited use and...no restrictions on any land use are necessary..." Please provide additional clarification.



## 2.8 Community Participation

Community participation at WPNSTA Yorktown includes a Restoration Advisory Board (RAB), public meetings, public information repositories, newsletters, fact sheets, public notices, and an ERP Web site. The Community Involvement Plan for WPNSTA Yorktown provides detailed information on community participation for the ERP. The RAB was formed in 1994 and consists of community members, and representatives of the USEPA Region 3, the VDEQ, and the Navy. RAB meetings are held twice a year and are open to the public to provide opportunity for public comment and input.

The investigations conducted at Site 30, the findings, and the Proposed Plan (PP) that forms the basis for this NFA ROD have been presented and discussed with the RAB. In addition, in accordance with Section 117(a) of CERCLA, the Navy provided a public comment period from November 2, 2009 through December 17, 2009 for the Site 30 NFA PP. In accordance with 40 DFR 300.430(f) (3)(1)(A), a notice of availability was published in *The Virginia Gazette* and the *Daily Press* on October 31 and November 1, 2009, respectively. The PP was available for review during the public comment period at the York County Public Library - Yorktown (8500 George Washington Memorial Highway, Yorktown, VA 23692, 757-890-3377). The public comment period included a public meeting to present the PP, which was held on November 19, 2009 at the Yorktown-York County Public Library - Yorktown. No comments were received during the public comment period for the Site 30 NFA PP.

This ROD, the PP, and all other information that supports this NFA determination are available in the AR. The AR is accessible to the public at:

Public Affairs Office  
NAVFAC Atlantic  
6506 Hampton Blvd  
Norfolk, VA 23508-1278  
757-322-8005

Comment [WMS3]: The Final Proposed Plan states the phone number is:  
757.322.4785

### 3 Responsiveness Summary

The participants in the public meeting included RAB members and representatives of the Navy, and VDEQ. No members of the public attended the meeting. In addition, no written comments, concerns, or questions were received by the Navy, USEPA, or VDEQ during the public comment period.



## References

Item	Reference Phrase in ROD	Location in ROD	Identification of Referenced Document Available in the Administrative Record
Ref. 1	analytical results	Table 1	Black & Veatch. 1996. AOC22, Site 12, SSA2, SSA19, and King Creek Independent Sampling and Risk Screening Report, Naval Weapons Station, Yorktown, Virginia. Appendix A. AR No. 01175.
Ref. 2	analytical results	Table 1	Baker. 2001. <i>Final Site Screening Process Report, Vols. 1 through 3</i> , Naval Weapons Station, Yorktown, Virginia. Tables 6-4 through 6-7. AR No. 01350, 01351, 01352
Ref. 3	three remedial action alternatives	Table 1	Baker. 2007. <i>Final Engineering Evaluation/Cost Analysis for Contaminated Soil</i> , Naval Weapons Station, Yorktown, Virginia. April. Section 5.1. AR No. 2211
Ref. 4	preliminary remediation goals (PRGs)	Table 1	<i>Final Engineering Evaluation/Cost Analysis for Contaminated Soil</i> , Naval Weapons Station, Yorktown, Virginia. April. Table 3-2. AR No. 2211
Ref. 5	below the PRGs	Table 1	Shaw. 2009. <i>Final Construction Completion Report Bracken Road Incinerator Removal Action at Site 30</i> , Naval Weapons Station, Yorktown, Virginia. April. Tables 4 through 8. AR No. Pending.
Ref. 6	no detections of volatile organic compounds (VOCs) analytical results	Table 1	CH2M HILL 2009. <i>Technical Memorandum, Yorktown Site 30 Groundwater Data Review and Risk Management Consideration</i> , Naval Weapons Station, Yorktown, Virginia. May. Attachment 2, 2008 Resample Data. AR No. Pending.
Ref. 7	human health conceptual site model (CSM)	Section 2.6.1	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Figure 6-4. AR No. 2079
Ref. 8	no potential unacceptable human health risks	Section 2.6.1	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 6-25. AR No. 2079
Ref. 9	potential unacceptable human health risks	Section 2.6.1	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 6-25. AR No. 2079

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## REFERENCES

Item	Reference Phrase in ROD	Location in ROD	Identification of Referenced Document Available in the Administrative Record
Ref. 10	confirmation sampling results	Section 2.6.1	Shaw. 2009. <i>Final Construction Completion Report Bracken Road Incinerator Removal Action at Site 30</i> , Naval Weapons Station, Yorktown, Virginia. April. Tables 4 through 8. AR No. Pending.
Ref. 11	ecological CSM	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Figure 7-31. AR No. 2079
Ref. 12	ecological assessment and measurement endpoints	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-1. AR No. 2079
Ref. 13	bioaccumulating chemical	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-3. AR No. 2079
Ref. 14	Media-specific screening values	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-2. AR No. 2079
Ref. 15	ecological COPCs	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-79. AR No. 2079
Ref. 16	no potential unacceptable risks	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-89. AR No. 2079
Ref. 17	no unacceptable ecological risk	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-89. AR No. 2079
Ref. 18	potential unacceptable ecological risks	Section 2.6.2	Baker. 2005. <i>Final Round One Remedial Investigation Report</i> , Naval Weapons Station, Yorktown, Virginia. July. Table 7-89. AR No. 2079
Ref. 19	confirmation sampling results	Section 2.6.2	Shaw. 2009. <i>Final Construction Completion Report Bracken Road Incinerator Removal Action at Site 30</i> , Naval Weapons Station, Yorktown, Virginia. April. Tables 4 through 8. AR No. Pending.

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Detailed site information reference in this ROD in bold blue text is contained in the Administrative Record.

For access to information contained in the Administrative Record for WPNSTA Yorktown please contact:

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Norfolk, Virginia 23508-1278  
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Comment [WMS4]: The Final Proposed Plan states the phone number is: (757) 322-4785